

Contents

Volume 53 (1990)

No. 1

Review article

- A. Chattopadhyay (Davis, CA), *Chemistry and biology of N-(7-nitrobenz-2-oxa-1,3-diazol-4-yl)-labeled lipids: fluorescent probes of biological and model membranes* 1
- F. Severcan and S. Cannistraro (Perugia, Italy), *A spin label ESR and saturation transfer ESR study of α -tocopherol containing model membranes* 17
- G. Graff, L.A. Anderson, L.W. Jaques and R.T. Scannell (Richmond, VA), *Evidence for the formation of 2-hydroxyethyl esters by reaction of fatty acids with diazomethane in diethyl ether* 27
- T.D. Madden P.R. Harrigan, L.C.L. Tai, M.B. Bally, L.D. Mayer, T.E. Redelmeier, H.C. Loughrey, C.P.S. Tilcock, L.W. Reinish and P.R. Cullis (Vancouver, Canada), *The accumulation of drugs within large unilamellar vesicles exhibiting a proton gradient: a survey* 37
- T. Shibata (Saitama, Japan), *Pulse NMR study of the interaction of calcium ion with dipalmitoylphosphatidylcholine lamellae* 47
- N. Noda and R.W. Keenan (San Antonio, TX), *Phosphatidyl inositol isopropylidene derivatives: synthesis, characterization and use as synthetic intermediates* 53
- P. Lemmen, K.M. Buchweitz and R. Stumpf (Garching, F.R.G.), *A synthesis of phospholipids using a phosphite-triester approach and uniformly cleavable β -halogenated protecting groups* 65
- D. Bergenthal, E. Schulte and N. Weber (Munster, F.R.G.), *Formation and characterization of $\Delta^{5,6/5',6'}$ -unsaturated disteryl ethers* 77
- B. Röder, J. Dabrowski, U. Dabrowski, H. Egge, J. Peter-Katalinić, G. Schwarzmam and K. Sandhoff (Bonn and Heidelberg, F.R.G.), *The determination of phytosphingosine-containing globotriaosylceramide from human kidney in the presence of lactosylceramide* 85
- J. Lang, C. Vigo-Pelfrey and F. Martin (Menlo Park, CA), *Liposomes composed of partially hydrogenated egg phosphatidylcholines: fatty acid composition, thermal phase behavior and oxidative stability* 91
- M.S. Shashidhar, J.F.W. Keana, J.J. Volwerk and O.H. Griffith (Eugene, OR), *Synthesis of phosphonate derivatives of myo-inositol for use in biochemical studies of inositol-binding proteins* 103
- H.S. Hendrickson and E.K. Hendrickson (Northfield, MN), *A facile asymmetric synthesis of glycerol phospholipids via tritylglycidol prepared by the asymmetric epoxidation of allyl alcohol. Thiolester and thioether analogs of phosphatidylcholine* 115

Short communication

- M. Prashad, J.C. Tomesch and J.R. Wareing (East Hanover, NJ), *Synthesis of 1-O-(15-carboxypentadecyl)-2-O-acetyl-sn-glycero-3-phosphorylcholine as a potential platelet activating factor (PAF) hapten* 121
- Book Review 127

Nos. 2,3

- T. Thuren, J.A. Virtanen and P.K.J. Kinnunen (Helsinki, Finland), *Phospholipid-platelet activating factor interactions probed by monolayers, pyrene fluorescence and phospholipase A₂* 129
- B. Focher, G. Savelli and G. Torri (Milan, Italy), *Neutral and ionic alkylglucopyranosides. Synthesis, characterization and properties* 141
- A.R. Venkitaraman, S.B. Hall and R.H. Notter (Rochester, NY), *Hydrophobic homopolymeric peptides enhance the biophysical activity of synthetic lung phospholipids* 157

S. Marchesini, A. Preti, M.F. Aleo, A. Casella, A. Dagan and S. Gatt (Brescia, Italy and Jerusalem, Israel), <i>Synthesis, spectral properties and enzymatic hydrolysis of fluorescent derivatives of cerebroside sulfate containing long-wave-length-emission probes</i>	165
L. Finegold, W.A. Shaw and M.A. Singer (Philadelphia, PA, Birmingham, AL and Kingston, Canada), <i>Unusual phase properties of dilauryl phosphatidylcholine (C12PC)</i>	177
L.B.-Å. Johansson, J.G. Molotkovsky and L.D. Bergelson (Umea, Sweden and Moscow, U.S.S.R.), <i>Fluorescence properties of anthrylvinyl lipid probes</i>	185
K.H. Cheng (Lubbock, TX), <i>Headgroup hydration and motional order of lipids in lamellar liquid crystalline and inverted hexagonal phases of unsaturated phosphatidylethanolamine — A time-resolved fluorescence study</i>	191
M.S.F. Lie Ken Jie and O. Bakare (Hong Kong), <i>The preparation and some physical properties of ten methyl dithiostearate isomers</i>	203
J.A. Rogers and T. Cheuk (Edmonton, Canada), <i>Partial specific volumes of liposome systems</i>	211
P. Allevi, M. Anastasia, P. Ciuffreda, A. Fiecchi and A. Scala (Milan, Italy), <i>The first example of C-glucopyranosides</i>	219
J. Gallová, F. Devinsky and P. Balgavý (Bratislava, Czechoslovakia), <i>Interaction of surfactants with model and biological membranes. II Effect of N-alkyl-N,N,N-trimethylammonium ions on phosphatidylcholine bilayers as studied by spin probe ESR</i>	231
B.R. Rudolph, I. Chandrasekhar, B. Gaber and M. Nagumo (Washington DC and Bangalore, India), <i>Molecular modeling of saccharide-lipid interactions</i>	243
Book Review	263

No. 4

Review article

P. Walde, A.M. Giuliani, C.A. Boicelli and P.L. Luisi (Zurich, Switzerland and Palermo and Milan, Italy), <i>Phospholipid-based reverse micelles</i>	265
A. Fröling (Vlaardingen, The Netherlands), <i>Synthesis of defined oligoricinoleoyl oligoglycerols</i>	289
J.J.M. van den Berg, F.A. Kuypers, B. Roelofsen and J.A.F. Op den Kamp (Utrecht, The Netherlands and Oakland, CA), <i>The cooperative action of vitamins E and C in the protection against peroxidation of parinaric acid in human erythrocyte membranes</i>	309
S.Y. Chen, K.H. Cheng and D.M. Ortalano (Lubbock, TX), <i>Lateral diffusion study of excimer-forming lipids in lamellar to inverted hexagonal phase transition of unsaturated phosphatidylethanolamine</i>	321
P. Martel and F.U. Ahmed (Chalk River, Canada), <i>Neutron diffraction from cannabinoids in phospholipid membranes</i>	331
A. Gulik, P. Tchoreloff and J.-E. Proust (Gif sur Yvette, Chatenay-Malabry and Angers, France), <i>Bipolar tetraether lipid monolayers: correlation between interfacial properties and superficial structures as observed by electron microscopy</i>	341
H. Hönig and R. Zenk (Graz, Austria), <i>Syntheses of polymeric vesicles containing partial structures of N-acetyl-muramyl-dipeptide (MDP)</i>	347
T. Ionedá (São Paulo, Brazil), <i>O-Benzoylation as a derivatization procedure for analysis of 1-monomycoloylglycerol by mass spectrometry</i>	357
M.C. Pedrosa de Lima, B.H. Chiche, R.J. Debs and N. Düzgüneş (San Francisco, CA, Coimbra, Portugal and Stanford, CA), <i>Interaction of antimycobacterial and anti-pneumocystis drugs with phospholipid membranes</i>	361

Short communication

K. Yamauchi, I. Yamamoto, A. Moriya, M. Kinoshita and T. Higuchi (Osaka, Japan), <i>Very long single-alkyl chain amphiphiles: planar membranes from triacontylphosphorylcholine</i>	373
Subject Index — Volume 53	377
Author Index — Volume 53	381
Contents — Volume 53	383

